UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,988	03/22/2000	David Barach	2386.2001-000	8379

21005   7590   11/04/2004

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EXAMINER
RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/532,988	BARACH, DAVID
		Examiner	Art Unit
		Daniel J. Ryman	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

    A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

2.   Applicant indicated in the Response that claim 37 was amended to overcome the 112 rejection; however, claim 37 was not amended. Therefore, Examiner has maintained the rejection of claim 37.

3.   If Applicant does not traverse the Examiner's assertion of official notice or Applicant's traverse is not adequate, then the common knowledge or well-known in the art statement is taken to be admitted prior art because Applicant failed to traverse the Examiner's assertion of official notice or that the traverse was inadequate (see MPEP §2144.03(c)).

Claim Objections

4.   Claims 10 and 19 are objected to because of the following informalities: "only if the age of the statistical data in the system controller was not timely sent" should be "only if the statistical data in the system controller was not timely sent." Appropriate correction is required.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6.   Claim 37 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which

it is most nearly connected, to make and/or use the invention. Claim 37 discloses "instructions to

make the statistical data available in the buffer as often as necessary but not so often that the

buffer is congested by the statistical data". The specification discloses that the element pre-

gathers the statistical data as often as necessary but not so often that the buffer is congested by

the statistical data (specification: page 11, lines 23-24). For the purpose of prior art rejection of

claim 37, Examiner will interpret "instructions to make the statistical data available in the buffer

as often as necessary but not so often that the buffer is congested by the statistical data" to be

"instructions to pregather the statistical data available as often as necessary but not so often that

the buffer is congested by the statistical data."

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's

disclosed prior art (referred to herein as Applicant) in view of Allen et al (USPN 5,495,522) in

further view of Naimpally et al (USPN 5,650,825) in further view of Carney et al. (USPN

6,449,663).

9.   Regarding claims 1, 10, 19, 20, 26, 32, 33, 39, and 40, Applicant discloses a system,

method, apparatus, and computer program for gathering statistical data from at least one element

(line card) in a multiprocessor system employing a half-duplex bus by a system controller, where

Examiner takes official notice that computer programs are well known in the art, the method

comprising the steps of and the system comprising the means for: gathering statistical data, about

a high-speed port, from at least one element (line card) in a multiprocessor system employing the

half-duplex bus (page 3, line 11-page 4, line 20); and reporting the statistical data from the buffer

to a system controller when polled by the system controller for the statistical data (page 5, line 9-

page 6, line 6).

Applicant does not disclose automatically pre-gathering the statistical data in an

information buffer in a controlled manner by an element of the multi-processor system; however,

pre-gathering information and storing the information for later retrieval is very old and well

known in the art. For instance, Allen teaches, in a system employing line cards, automatically

pre-gathering the statistical data in an information buffer (register) in a controlled manner by an

element (T1 card) where it is implicit that is done in order to provide at the time of collection the

statistical data collected over a period of time (col. 76, lines 17-37). It would have been obvious

to one of ordinary skill in the art at the time of the invention to automatically pre-gather the

statistical data in an information buffer in a controlled manner by an element where it is implicit

that is done in order to provide at the time of collection the statistical data collected over a period

of time.

Applicant in view of Allen does not disclose reporting the statistical data from the buffer

to a system controller in response to being polled for a reason other than for the statistical data;

however, Applicant in view of Allen discloses that a null is sent to the controller when the

element is polled for some other reason (Applicant: page 5, line 9-page 6, line 6). Naimpally

discloses, in a data transmission system, transmitting substantive data in place of null messages

in order to take advantage of the "wasted resources of a NULL packet" (col. 2, line 57-col. 3,

line 43; col. 4, line 66-col. 5, line 5; and col. 12, lines 1-7). It would have been obvious to one of

ordinary skill in the art at the time of the invention to transmit statistical data to the system

controller when polled for some other reason in order to take advantage of the wasted resources

of the NULL packet that is typically transmitted in response to a poll for some other reason. Thus

Applicant in view of Allen in further view of Naimpally discloses that the automatic pre-

gathering and subsequent reporting reduces the number of communications and data transfer

cycles required to transfer the statistical data from the element to the system controller resulting

in a reduction of bandwidth consumed by gathering the statistical data about the elements via the

half-duplex communication bus.

Applicant in view of Allen in further view of Naimpally does not expressly disclose

having the system controller determine if the statistical data is up-to-date and accessing the at

least one element for the statistical data only if the age of the statistical data in the controller is

older than a predefined threshold indicating that the statistical data was not timely sent in place

of a null response by the at least one element. However, Applicant in view of Allen in further

view of Naimpally does suggest having the system controller access the at least one element for

the statistical data or having the statistical data sent in place of a null response by the at least one

element (see above). Carney teaches, in a polling system, that using shorter intervals for polling

increases the cost of polling to the network; however, longer intervals for polling increases the

amount of time that will pass before a system recognizes changes in the system (col. 1, lines 46-

59). Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to have the system controller determine if the statistical data is up-to-date (polling

interval has elapsed) and accessing the at least one element for the statistical data only if the age

of the statistical data in the controller is older than a predefined threshold (polling interval)

indicating that the statistical data was not timely sent in place of a null response by the at least

one element in order to ensure that the system has the most accurate information at the least cost

to the system.

10.   Regarding claims 2, 11, 21, 27, and 34, referring to claims 1, 10, 20, 26, and 33,

Applicant in view of Allen in further view of Naimpally in further view of Carney discloses that

the statistical data is reported (Applicant: page 3, line 11-page 4, line 20 and page 5, line 9-page

6, line 6 and Naimpally: col. 2, line 57-col. 3, line 43 and col. 4, line 66-col. 5, line 5). Applicant

in view of Allen in further view of Naimpally in further view of Carney does not expressly

disclose that the buffer is organized in a queue and the statistical data is reported after the

statistical data has reached the head of the queue; however, Examiner takes official notice that

organizing data into a queue in a storage element and reading data that is at the head of the queue

is very old and well known in the art.

11.   Regarding claims 3 and 12, referring to claims 1 and 10, Applicant in view of Allen in

further view of Naimpally in further view of Carney discloses that the element is a line card

having at least one processor monitoring at least one communication port (Applicant: page 3,

line 11-page 4, line 20).

12.   Regarding claims 4 and 13, referring to claims 1 and 10, Applicant in view of Allen in

further view of Naimpally in further view of Carney discloses that the system reports the

gathered statistical data to a central statistical data gathering system (Applicant: page 3, line 11-

page 4, line 20 and Allen: col. 76, lines 17-37).

13.   Regarding claims 5, 14, 22, 28, and 35, referring to claims 1, 10, 20, 26, and 33,

Applicant in view of Allen in further view of Naimpally in further view of Carney discloses that

the statistical data includes information about an element communication port (Applicant: page

3, line 11-page 4, line 20). Applicant in view of Allen in further view of Naimpally in further

view of Carney does not expressly disclose that the buffer stores only one instance of

information about a communication port at any given time; however, Applicant in view of Allen

in further view of Naimpally in further view of Carney does disclose storing at least one instance

of information about a communication port at any given time (Applicant: page 3, line 11-page 4,

line 20 and Allen: col. 76, lines 17-37). It is generally considered to be within the ordinary skill

in the art to adjust, vary, select, or optimize the numerical parameters or values of any system

absent a showing of criticality in a particular recited value. The burden of showing criticality is

on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless

Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65

USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether,

492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA

1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to

store a single instance because it would have been obvious to store any number of instances

absent a showing of criticality by the Applicant. In addition, it is implicit that buffers have a

finite capacity. As such, it would have been obvious to one of ordinary skill in the art at the time

of the invention to store only a single instance of information about a communication port at any

given time in order to minimize the size of the buffer required for the device.

14.   Regarding claims 6, 15, 23, 29, and 36, referring to claims 1, 10, 20, 26, and 33,

Applicant in view of Allen in further view of Naimpally in further view of Carney discloses that

the element makes statistical data regarding respective ports available at least as often as the

system controller requires the statistical data (Applicant: page 3, line 11-page 4, line 20 and page

5, line 9-page 6, line 6; Allen: col. 76, lines 17-37; and Naimpally: col. 2, line 57-col. 3, line 43

and col. 4, line 66-col. 5, line 5).

15.   Regarding claims 7 and 16, referring to claims 1 and 10, Applicant in view of Allen in

further view of Naimpally in further view of Carney discloses that the element makes the

statistical data available at least one time per second (Applicant: page 3, line 11-page 4, line 20).

16.   Regarding claims 8, 17, 24, 30, and 37, referring to claims 1, 10, 20, 26, and 33,

Applicant in view of Allen in further view of Naimpally in further view of Carney does not

expressly disclose that the element makes the statistical data available as often as necessary but

not so often that the buffer is congested by the statistical data; however, Examiner takes official

notice that it is well known in the art to avoid buffer congestion since this results in loss of data

due to buffer overruns.

17.   Regarding claims 9, 18, 25, 31, and 38, referring to claims 1, 10, 20, 26, and 33,

Applicant in view of Allen in further view of Naimpally in further view of Carney discloses that

the element reports statistical data in place of reporting a null response (Naimpally: col. 3, lines

27-43 and col. 4, line 66-col. 5, line 5).

Conclusion

18.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The

examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel J. Ryman
Examiner
Art Unit 2665

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